artdaq Utilities - Support #24231

Add init_fragment_count to bookkept parameters in DAQInterface

03/26/2020 03:01 PM - Eric Flumerfelt

Status: Start date: Closed 03/26/2020 **Priority:** Normal Due date: % Done: Assignee: 100% **Estimated time:** 0.00 hour Category: Target version: Spent time: 0.00 hour **Experiment:** Co-Assignees:

Description

init_fragment_count should be set to the number of incoming serialized art events to a given process, with the caveat that processes with identical configuration should not be counted separately.

Examples:

- For an EventBuilder listening to BoardReaders, it should be zero.
- For an EventBuilder receiving from another EventBuilder using BinaryNetOutput, along with zero or more BoardReaders, it should be zero
- For an EventBuilder receiving from two EventBuilders in the same subsystem using RootNetOutput, it should be 1
- For an EventBuilder receiving from two EventBuilders in one subsystem, a third in a different subsystem, and zero or more BoardReaders, it should be 2
- For a Dispatcher receiving from four DataLoggers, it should be 4

Associated revisions

Revision 0898c60e - 03/28/2020 11:19 AM - John Freeman

JCF: Issue #24231: smoke-tested version of init_fragment_count bookkeeping, the smoke-test being that I was able to correctly bookkeep the complicated_subsystems example

Revision 0a202c67 - 03/29/2020 11:32 AM - John Freeman

JCF: add configs specifically meant to test code changes for Issue #24231; please revert before merging into the develop branch

Revision c3a85de7 - 03/29/2020 12:01 PM - John Freeman

JCF: Issue #24231: tweak the bookkeeping so test1 passes

Revision 75bd07e6 - 03/29/2020 12:13 PM - John Freeman

JCF: Issue #24231: make sure init_fragment_count is defined for all downstream artdaq processes in issue24231_test4

Revision c51a23ea - 03/29/2020 12:21 PM - John Freeman

JCF: Issue #24231: remove print statements used for development purposes

History

#1 - 03/26/2020 03:02 PM - Eric Flumerfelt

init_fragment_count lives with the SharedMemoryEventManager configuration, e.g. daq.eventbuilder

#2 - 03/29/2020 12:34 PM - John Freeman

- % Done changed from 0 to 100
- Status changed from New to Resolved

Resolved with commit c51a23ea74b0d0bf150b127d3bd4931c7ec6d0fc on the feature/24231_bookkeep_init_fragment_count branch. I created configs for testing the five examples given above, each config with the name "issue24231_testN", N being the number of the test. One exception is test 3 since there's not yet any provision for bookkeeping intra-subsystem EventBuilder-to-EventBuilder sends; if needed, then this should be its own issue. Tests 1,2,4 and 5 looked OK as far as I understand the requirements; the corresponding runs are 3556, 3557, 3559 and 3560 in mu2edaqXX:/home/jcfree/run_records. Just grep for "init_fragment_count" among the FHiCL documents there. One place I may be mistaken is in test 4, where I'm not certain whether the DataLogger and Dispatcher in subsystem 4 are supposed to have init_fragment_count set to 1 or 2 (they share a subsystem with an EventBuilder which has init_fragment_count set to 2).

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When we're done with testing this issue, we should remember to remove the issue24231_testN configs from the simple_test_config directory.

#3 - 11/30/2020 12:33 PM - Eric Flumerfelt

- Status changed from Resolved to Closed

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